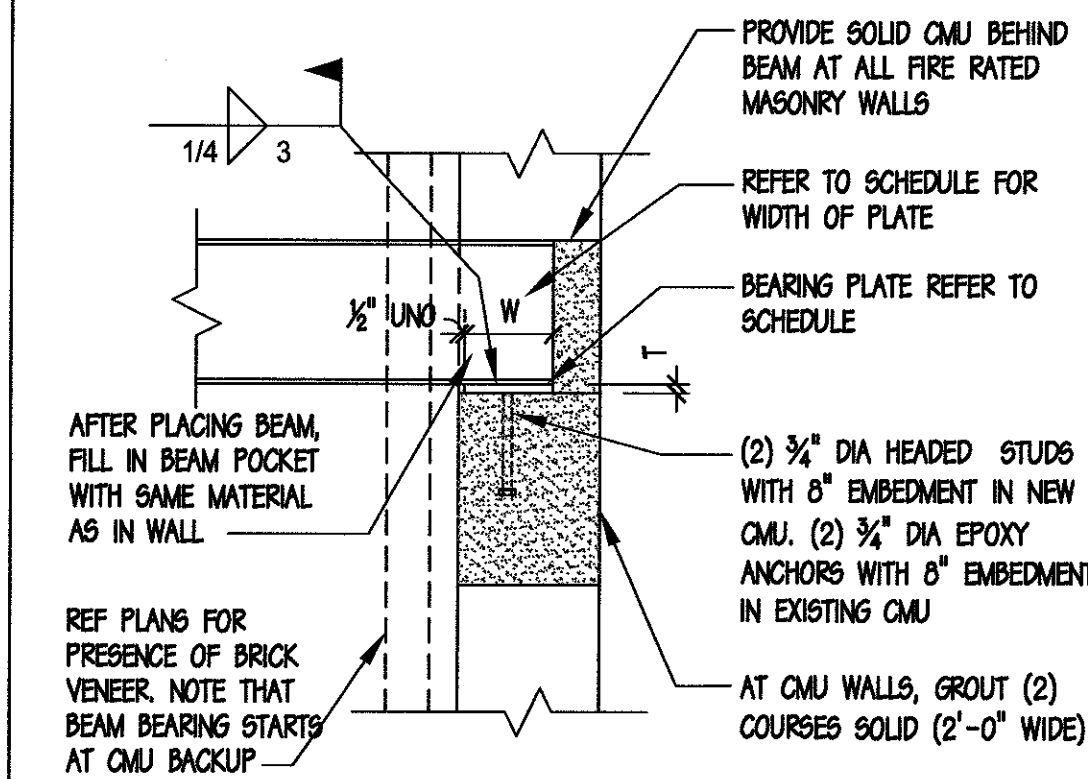


**TYPICAL PLAN DETAIL AT BEARING PLATE**

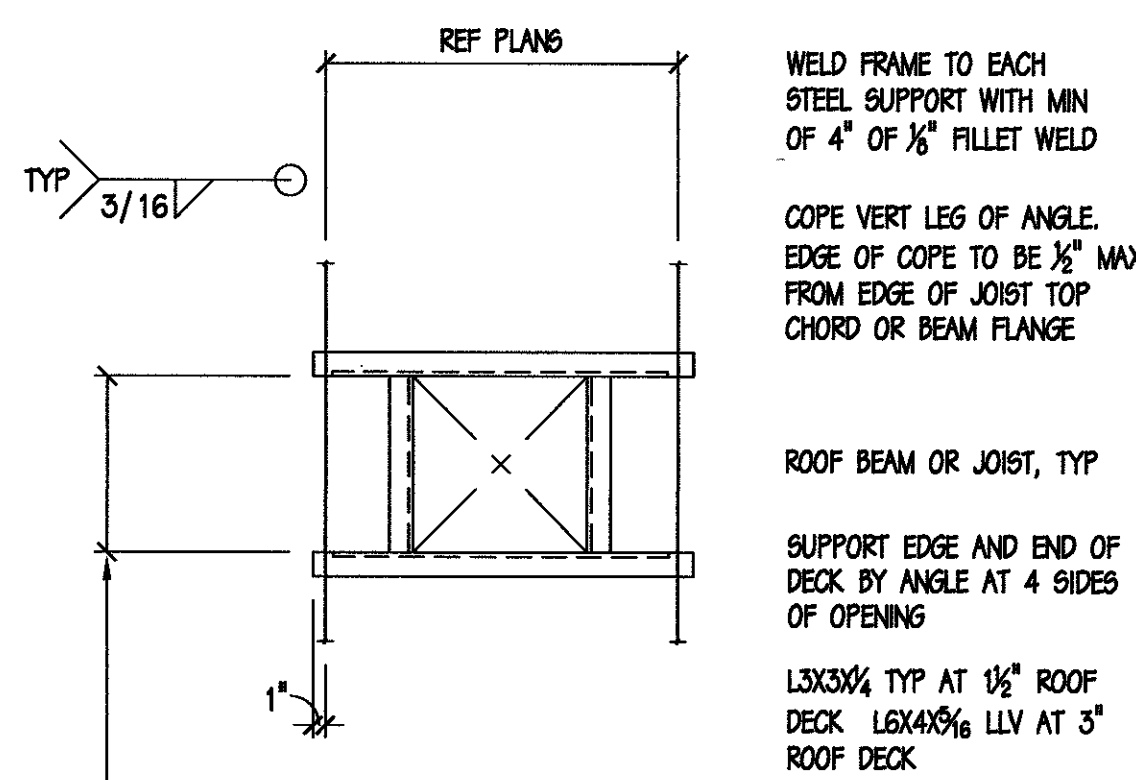


**TYPICAL SECTION AT BEARING PLATE WITH HEADED STUDS**

3/4" = 1'-0"

**STEEL BEAM BEARING PLATE SCHEDULE**

MARK	SIZE (THXKL)	COMMENTS
BP-A	PL3/8X7X1'-0"	
BP-B	PL1/2X7X1'-6"	
BP-C	PL3/8X11X1'-1"	



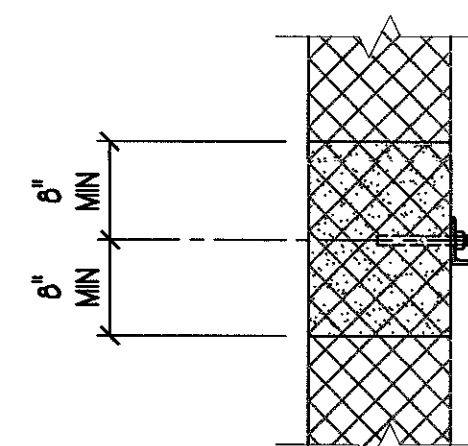
WHERE THIS DIMENSION OF ROOF OPENING IS 10' OR LESS, AND THE WEIGHT OF THE EQUIPMENT BEARING AT THE OPENING IS LESS THAN 150 POUNDS, ANGLE FRAME INDICATED IS NOT REQUIRED. DECK REIN SHALL CONSIST OF A 20" SQUARE, 14 GAUGE PLATE, SCREW PLATE TO DECK.

WHERE THIS OPENING IS 3/4" OR LESS AND THROUGH THE TOP OF THE DECK BETWEEN RIBS AND NO RIBS ARE CUT, NO REIN IS REQUIRED.

NOTE: THIS "TYPICAL ROOF OPENING FRAMING DETAIL" APPLIES TO ALL OPENINGS IN THE ROOF DECK THAT MAY BE INDICATED ON DRAWINGS OR NOT INDICATED AND ARE CUT IN THE FIELD AS PART OF THE CONSTRUCTION. THE CONTRACTOR SHALL REVIEW STRUCTURAL, ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS TO DETERMINE LOCATION AND SIZES OF OPENINGS THAT CAN BE DETERMINED FROM THE DRAWINGS. THE CONTRACTOR SHALL COORDINATE THE REQUIRED OPENING SIZES FOR EACH REQUIRED PENETRATION AND PROVIDE DECK REINFORCEMENT OR SUPPORT IN ACCORDANCE WITH THIS DETAIL.

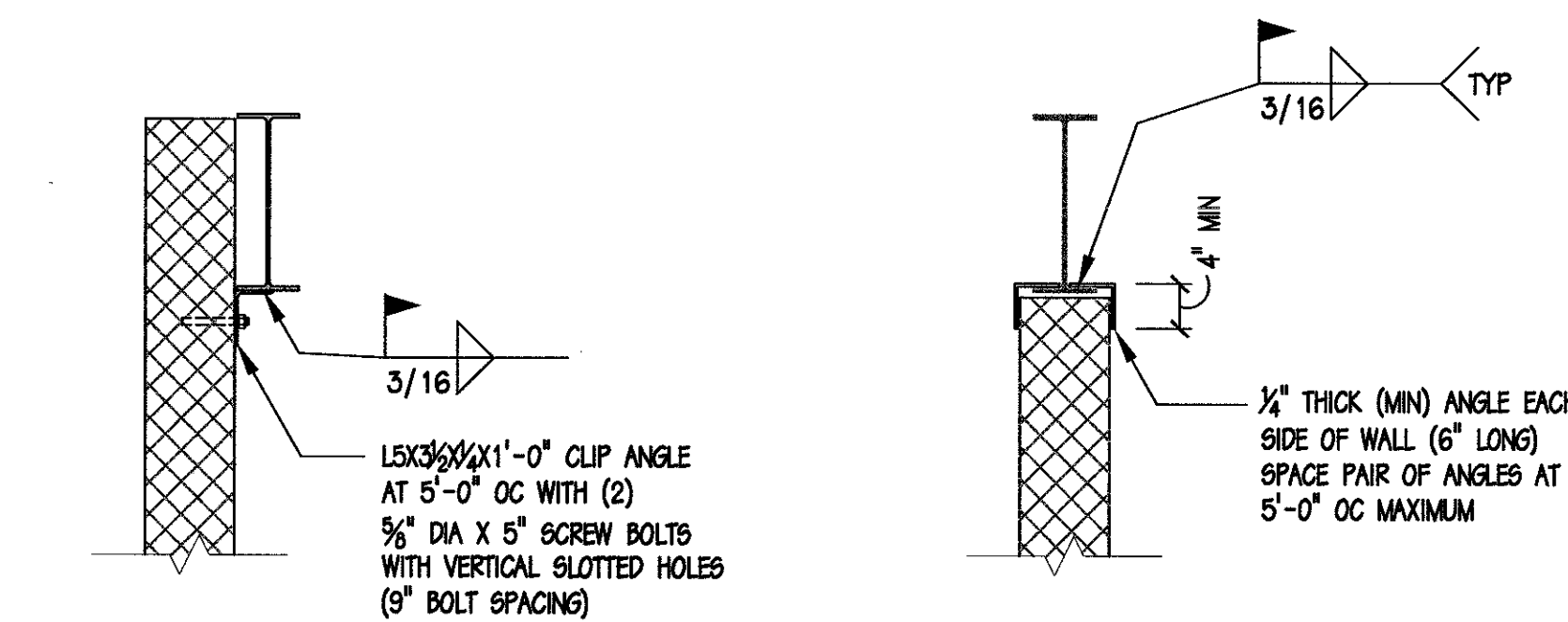
**TYPICAL ROOF OPENING FRAMING DETAIL**

NO SCALE



**TYPICAL WALL GROUTING AT POST-INSTALLED ANCHORS**

3/4" = 1'-0"

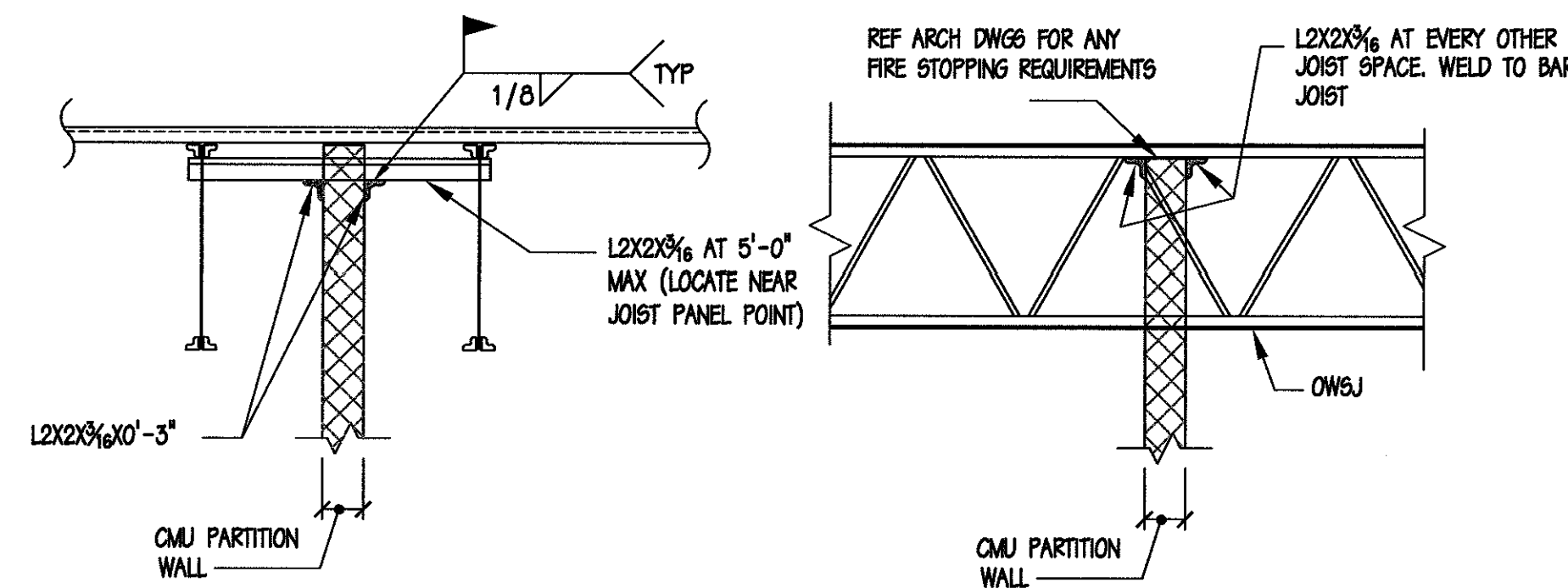


**PARTITION WALL BRACING WHERE WALL PASSES CLOSE BY BEAM**

3/4" = 1'-0"

**PARTITION WALL BRACING WHERE WALL IS CENTERED BELOW BEAM**

3/4" = 1'-0"



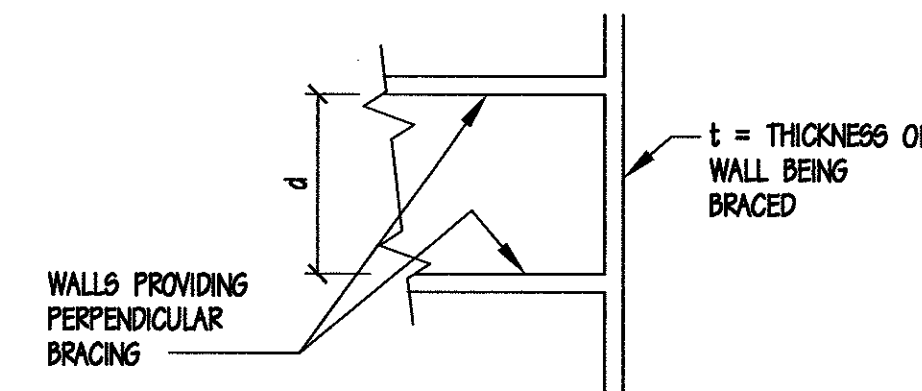
**WALL PARALLEL TO JOIST/UP TO DECK**

3/4" = 1'-0"

**WALL PERPENDICULAR TO JOIST/UP TO DECK**

3/4" = 1'-0"

**LATERAL BRACING AT THE TOP OF NEW NON-LOAD BEARING MASONRY PARTITION WALLS**



NOMINAL WALL THICKNESS "t" (INCHES)	MAXIMUM DISTANCE BETWEEN PERPENDICULAR BRACING WALLS "d" (FEET)
4"	9'-0"
6"	13'-6"
8"	18'-0"
10"	21'-6"
12"	25'-0"

WALLS WITH CONTROL JOINTS OR OPENINGS GREATER THAN 6'-0" TALL LOCATED IN THEM MAY NOT BE BRACED BY PERPENDICULAR WALLS. PROVIDE BRACING PER THESE TYPICAL DETAILS

**NOTES:**

- BRACE ALL INTERIOR NON-LOAD BEARING MASONRY PARTITION WALLS IN ACCORDANCE WITH ONE OF THESE TYPICAL DETAILS UNLESS INDICATED OTHERWISE IN CONTRACT DOCUMENTS. REFER TO STRUCTURAL DRAWINGS FOR CONNECTION DETAILS AT PARTITION WALLS USED AS SHEAR WALLS.
- PARTITION WALLS MAY ALTERNATIVELY BE BRACED BY PERPENDICULAR WALLS IF DISTANCE BETWEEN PERPENDICULAR WALLS COMPLIES WITH THE TABLE ABOVE.
- REFER TO ARCHITECTURAL DRAWINGS FOR PARTITION TYPES AND CLOSURE/FIRE SAFING CONDITIONS AT TOP OF WALL.

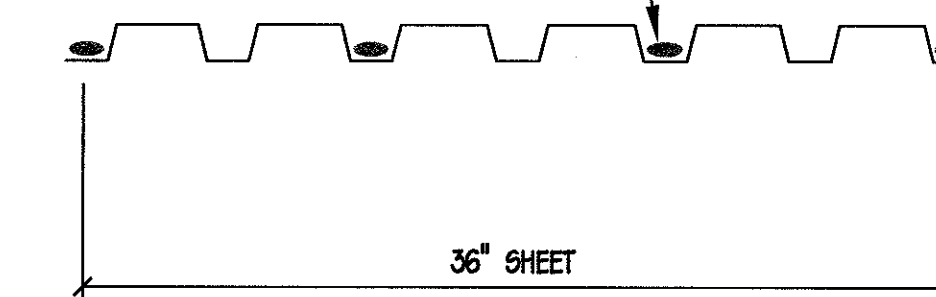
**BOLTING SCHEDULE**

BEAM SIZE	# OF BOLTS IN SINGLE SHEAR CONN	# OF BOLTS IN DOUBLE ANGLE CONN
WB	2	2 ANGLES X 2 BOLTS = 4 TOTAL
W10	2	2 ANGLES X 2 BOLTS = 4 TOTAL
W12	3	2 ANGLES X 3 BOLTS = 6 TOTAL
W14	3	2 ANGLES X 3 BOLTS = 6 TOTAL
W16	4	2 ANGLES X 4 BOLTS = 8 TOTAL
W18	5	2 ANGLES X 4 BOLTS = 8 TOTAL
W21	6	2 ANGLES X 5 BOLTS = 10 TOTAL
W24	7	2 ANGLES X 5 BOLTS = 10 TOTAL

**NOTES:**

- BOLTS ARE 3/4" DIA ASTM A325N UNF.
- BOLT HOLES FOR SINGLE SHEAR CONN OR SINGLE ANGLE CONN SHALL BE HORIZ SHORT-SLOTTED HOLES UNO - PROVIDE STD ROUND HOLES AT FULL HEIGHT STIFF PLATES.
- SINGLE SHEAR CONN SHALL BE 3/8" SHEAR TAB OR 3/8" FULL HEIGHT STIFF PLATE AS INDICATED IN DETAILS.
- STANDARD DOUBLE ANGLE THICKNESS SHALL BE 5/16" MINIMUM. USE SHORT HORIZ SLOTTED HOLES IN ANGLE.
- WHERE SLIP CRITICAL CONNECTION OR FULLY PRE-TENSIONED BOLTS ARE INDICATED, USE TENSION CONTROL BOLTS (TWIST-OFF TYPE).

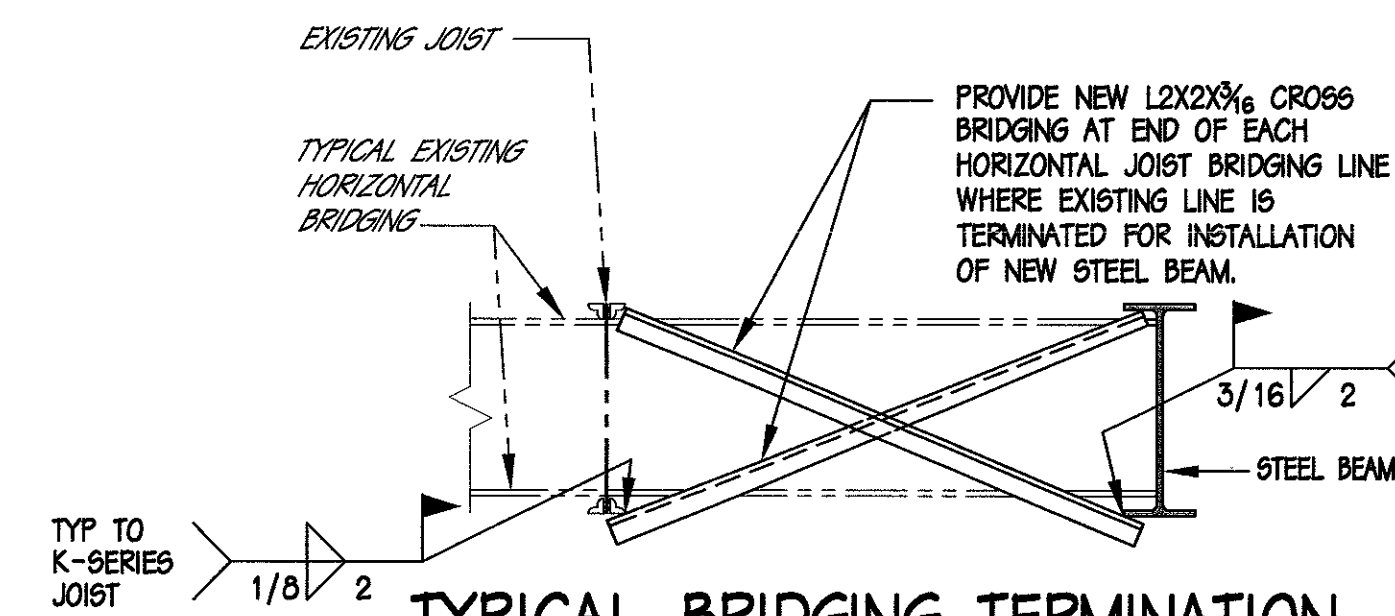
(4) 3/8" DIA PUDDLE WELDS AT SUPPORTS - WELD AT 6" OC AT ENDS AND END LAPS - WELD AT 6" OC AT SIDE TERMINATION OF DECK OVER CONT STEEL BEAM OR ANGLE



**TYPICAL 1 1/2" STEEL ROOF DECK ATTACHMENT**

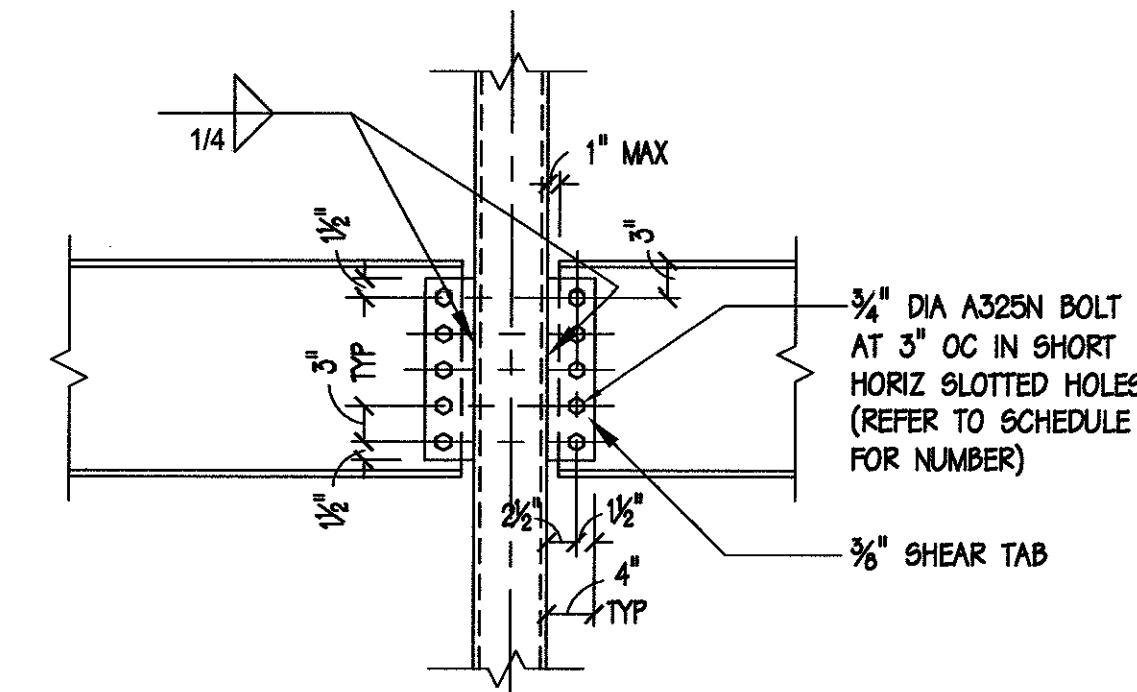
1/2" = 1'-0"

NOTE: ATTACHMENT PATTERN APPLIES TO BOTH TYPE "f" ROOF DECK AT GLENN AND TYPE "b" AT WARSAW



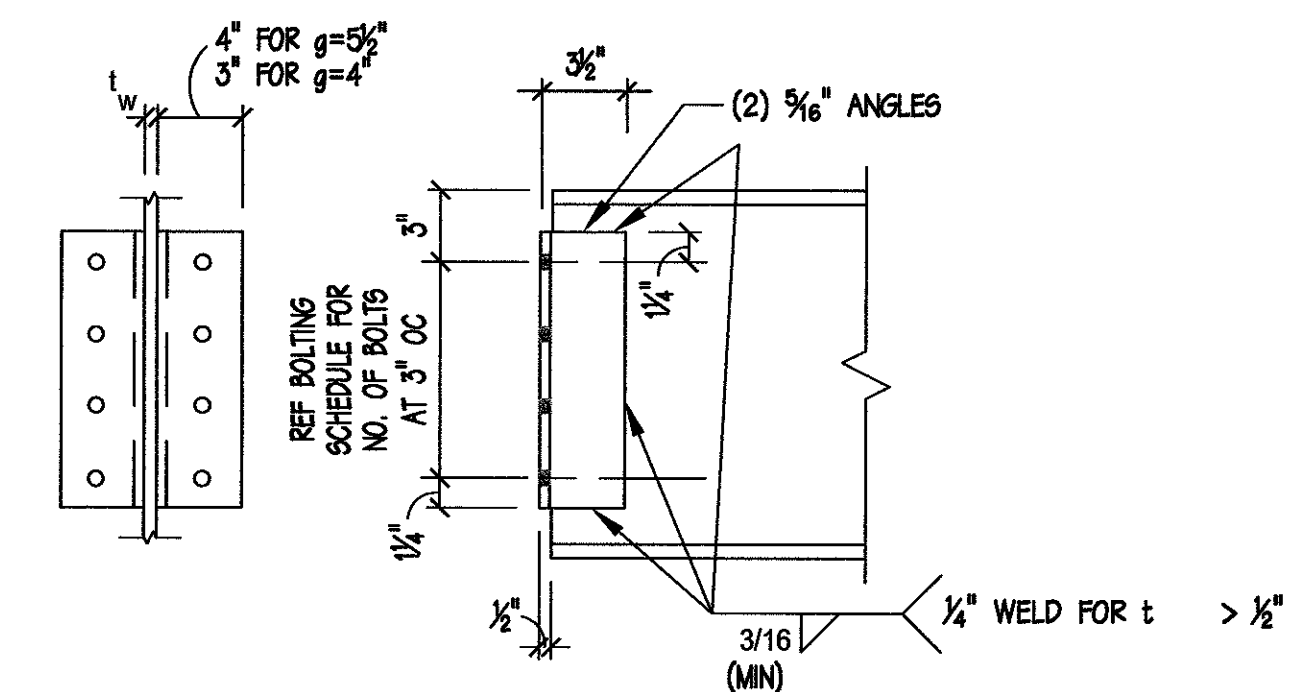
**TYPICAL BRIDGING TERMINATION AT STEEL BEAM**

3/4" = 1'-0"



**TYPICAL BEAM TO HSS COLUMN CONNECTION**

3/4" = 1'-0"



**TYPICAL DOUBLE ANGLE CONNECTION**

3/4" = 1'-0"

- DETAIL APPLIES AT WIDE FLANGE BEAM CONNECTIONS TO COLUMN AND OTHER WIDE FLANGE BEAMS.
- AT BEAM TO GIRDER CONNECTIONS, PROVIDE ERECTION SEAT ANGLE FOR ONE BEAM WHERE MEMBERS FRAME OPPOSITE EACH OTHER AND USE SAME NUMBER OF BOLTS.
- REFER TO FRAMED BEAM CONNECTION SCHEDULE FOR REQUIRED NUMBER OF ROWS OF BOLTS.